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## Educational Expertise, Advocacy, and Media Influence

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**Abstract:** The efforts of many advocacy organizations to advance their preferred policies despite conflicting evidence of the effectiveness of these policies raise questions about factors that shape successful policy promotion. While many may like to think that expertise on an issue in question is an essential prerequisite for influence in public policy discussions, there is a traditional disconnect between research evidence and policymaking in many fields, including education. Moreover, the efforts of many policy advocates suggest that they see advantages in other factors besides research expertise in advancing their interpretation of evidence for use in policymaking processes. We hypothesize that some of the most influential education-focused organizations are advancing their agendas by engaging media and drawing on individuals who possess substantial media acumen, yet may not possess traditionally defined educational expertise. Thus, we hypothesize that media impact is loosely coupled with educational expertise. In fact, in analyzing various indicators of expertise and media penetration, we find a weak relationship between expertise and media impact, but find significantly elevated media penetration for individuals working at a sub-sample of organizations promoting what we term “incentivist” education reforms, in spite of their generally lower levels of expertise. We find these organizations are particularly effective in engaging new media forms by going directly to their audience. We consider the policy implications in the concluding discussion.

**Keywords:** agenda setting; decision making; educational policy; expertise; information dissemination; political influences; politics.

### **Expertos en educación, esfuerzos de promoción e influencia mediática**

**Resumen:** Los esfuerzos de muchas organizaciones para promover sus políticas a pesar de las pruebas contradictorias sobre la efectividad de estas políticas plantean preguntas acerca de los factores que configuran una promoción política exitosa. Si bien muchos quisieran pensar que los niveles de “experiencia técnica” son un requisito previo esencial para influir en los debates de política pública, en muchos campos, como la educación, hay una tradición de desconexión entre tener datos de investigación y la formulación de políticas. Por otra parte, los esfuerzos de muchas organizaciones para promover sus políticas sugieren que ven ventajas en otros factores, además de la “conocimientos expertos” en investigación para apoyar sus ideas en los procesos de formulación de políticas. Nuestra hipótesis es que algunas de las organizaciones de educación más influyentes están avanzando sus agendas mediante la participación en medios de comunicación y sobre la base de los individuos con buena penetración en medios de comunicación, aun cuando, no tengan los conocimientos expertos educativos definidos tradicionalmente. Por lo tanto, nuestra hipótesis es que el impacto mediático está poco conectado con conocimientos expertos. De hecho, en el análisis de diversos indicadores de experiencia y la penetración de los medios de comunicación, encontramos una relación débil entre experiencia e impacto mediático, pero encontramos la penetración de los medios de comunicación significativamente elevados para las personas que trabajan en una sub-muestra de organizaciones que promueven lo que llamamos las reformas educativas “incentivadoras”, a pesar de bajos niveles de especialización. Encontramos que estas organizaciones son particularmente eficaces para comprometer a las nuevas formas de comunicación al ir directamente a su público. Consideramos las implicaciones política en el las conclusiones.

**Palabras-clave:** establecimiento de agendas; toma de decisiones; política educativa; conocimientos expertos; difusión de información; influencias políticas; política.

### **Especialistas em educação, promoção, influência da mídia**

**Resumo:** Os esforços de muitas organizações para promover suas políticas, apesar de evidências conflitantes sobre a eficácia dessas políticas, levantam questões sobre os fatores que moldam uma defesa política bem-sucedida. Enquanto muitos possam pensar que os níveis de “expertise” são essenciais para influenciar debates de políticas públicas em diversas áreas, há uma já tradicional desconexão entre a resultados de investigação e a formulação de políticas, em vários campos, inclusive na educação. Além disso, os esforços de muitas organizações para promover a sua política sugerem que estas veem vantagens em outros fatores além da “expertise” para avançar sua interpretação de evidências de pesquisa para uso em processos de formulação de políticas. Nossa hipótese é que algumas das instituições de ensino mais influentes estão avançando suas agendas através da participação nos meios de comunicação e com base em indivíduos com boa penetração na mídia, que podem não ter experiência em educação como tradicionalmente definida. Portanto, a nossa hipótese é de que o impacto midiático está mal conectado com a “expertise” educacional. Na verdade, na análise de diversos indicadores de “expertise” e penetração dos meios de comunicação, encontramos uma relação fraca entre experiência e impacto mediático, mas encontramos uma penetração significativa na mídia por pessoas que trabalham em uma sub-amostra de organizações promovendo o que chamamos de “incentivadores” de reformas educativas, apesar dos baixos níveis de especialização. Descobrimos que essas organizações são

particularmente eficazes em engajar novas formas de comunicação para atingir diretamente o seu público. Uma discussão sobre as implicações políticas é apresentada nas conclusões.

**Palavras-chave:** definição da agenda; tomada de decisão; política educacional; especialização; difusão de informações; política de influência; política.

## Educational Expertise, Advocacy, and Media Influence

Calls for “evidence-based social policy” underline the distance between how policy is actually made and the ideal of weighing the evidence on social problems and calmly considering the best options ideally produced and/or interpreted by people with some degree of expertise on the issues in question (e.g., Orszag, 2009).<sup>1</sup> Many of the problems we face, whether social or natural, involve complex systems that are not easily understood. However, the simple application of expertise to identify the best solution to these problems is far from a given. Instead, as a long scholarly tradition has indicated, policymakers are susceptible to special interest groups trying to advance their agendas (Becker & Nashat, 1997; Kalt & Zuppan, 1984; Stigler, 1998). Advocacy groups put considerable effort into strategies that advance their agendas, often by assuming the mantle of expertise, and projecting that assumed status into media and policy debates. The media, old and new, serve as an important source for keeping members of the public, including policymakers, informed (DeBray, Scott, Lubienski, & Jabbar, 2014; Henig, 2008); therefore, the media represents an important object of inquiry to enhance our understanding of contemporary research-policy relations.

In this study, we examine the tenuous and politicized link between research and policymaking in education (Baker & Welner, 2012; Lubienski & Weitzel, 2010; Lubienski, Weitzel, & Lubienski, 2009; Malin & Lubienski, 2013). Researchers have noted for some time a disconnect between research production and policymaking, particularly in ideologically-tinged areas such as education, and have considered ways that the link might be strengthened (Tseng, 2012; Weiss, 1995). While some have observed that the actual impact of research is difficult to determine in policy processes, and that research use can vary considerably, many see a general paucity of research evidence informing education policy debates, and have sought to understand this phenomenon (Williams & McDermott, 2014). Explanations for this disconnect include the fact that researchers and policymakers often see different purposes for research (Weiss, 1979); the technical or ambiguous nature of much research, academic language and assumptions (Amara, Ouimet, & Landry, 2004; Nelson, Leffler, & Hansen, 2009); or a lack of incentives for policymakers to use research evidence in decision-making (Prewitt, Schwandt, Straf, & National Research Council (U.S.). Committee on the Use of Social Science Knowledge in Public Policy, 2012). While some federal initiatives, such as No Child Left Behind, famously attempt to elevate rigorous evidence into decisions, particularly for practitioners, others seek to bridge the gap by understanding and addressing the social processes through which policy draws on evidence (Tseng, 2012). Regardless of these efforts, though, the general disconnect between research production and consumption in educational policy has drawn the attention of a number of new intermediaries that seek to facilitate the use of research by policymakers—albeit often only

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<sup>1</sup> Examples of the push for evidence based policy include:

<http://www2.ed.gov/nclb/methods/whatworks/research/index.html>

<http://coalition4evidence.org/>

<http://www.ohsu.edu/xd/research/centers-institutes/evidence-based-policy-center/>

<http://wtgrantfoundation.org/FocusAreas#use-of-research-evidence>

selected research that supports a particular agenda (Lubienski, Scott, & DeBray, 2011; Ness & Gándara, 2014).

We study the relationship between research production and consumption by analyzing the efforts made by intermediaries to connect the two, focusing here on the media stream, and in particular on new media forms, and the success of different individuals, institutions and advocacy groups in inhabiting these media (Kingdon, 2003). The media represents an important consideration. Established sources of media such as op-eds in print media and newer forms such as blogs and Twitter inform congressional aides and other policy actors (Goldie, Linick, Jabbar, & Lubienski, 2014). The considerable and concerted efforts some research organizations and policy advocates invest in media campaigns to promote a new report, for example, points to the significance of these forums.

The democratizing trend of the internet and the consequent decline in editorial oversight and other traditional forms of quality control may increase the possibility that some media provide an attractive opportunity for advocates seeking to make ideologically based assertions in the guise of expert insights. This may provide individuals within organizations with substantial media acumen—whether those individuals are experts or not—an advantage in engaging policy discussions. Likewise, such organizations could be incentivized to hire individuals with media skills rather than any particular expertise on given issues.

This question has particular pertinence as media changes in the digital age. As new entrants have penetrated the intermediary sector that conveys information from knowledge producers to audiences (DeBray et al., 2014; Lubienski et al., 2011), professional norms governing established news organizations have been challenged by democratizing, or marketizing, forces, since organizations must now compete to hold viewers' and readers' attention (Lubienski, Scott, & DeBray, 2014). Competing information on issues such as the efficacy of policy interventions is available from multiple channels, e.g. over Twitter and the blogosphere, for instance, where consumers must now decide which sources to trust. Thus, it remains to be seen whether new and old media together will offer policy advocates and research consumers new opportunities to connect on evidence through an information superhighway, or a muddy river, clouded by questionable claims and evidence.

In this study, we examine the extent to which media coverage of education policy issues draws on sources with demonstrable expertise or, for instance, the affiliated organization's support for media engagement or orientation toward particular policy issues.<sup>2</sup> In so doing, we draw on previous attempts of others to measure media and policy impact in education, but offer a much more comprehensive and nuanced approach. Specifically, we derive a larger and more ideologically diverse sample than previously constructed ones (e.g., Hess, 2011, 2014a). Also, we incorporate contemporary measures of media (both new and traditional) influence and control variables and measures of organizational backing, and we utilize generalized linear modeling to address our questions. The answers to these questions have significant implications for the potential of current policy dynamics to address the complex issues we face.

In the following section, we outline some of the major issues from recent trends in media, research production and policymaking, highlighting some of the key themes guiding our inquiry. Subsequently, we describe our analytical approach and present results. In the

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<sup>2</sup> Notably, here we do not consider the rigor of research conducted by individuals or organizations, but only their expertise on these issues.

conclusion we discuss the results with emphasis on the optimal and ideal(ized) role of expertise in policymaking.

## Expertise and Evidence in Media

In a democratic system, there is an inherent tension between the role of experts and that of the wider public when it comes to complex issues with broader public policy implications. Problems that are multi-dimensional and multifaceted would appear to require the attention of experts. At the same time, the democratic allegiance to free speech and free association allows for like-minded individuals and interest groups to organize in order to advocate around these issues, attempting to sway both public opinion and policy debates. In that context, attempts to advance an agenda may not necessarily be aligned with “objective” conceptions of the evidence, facts, or “truth” on a given issue. Yet, the degree to which discussions are guided by generally recognized experts, or open to influence of special interests, can vary substantially by sector.

Perhaps the most obvious current example of battles over expertise is human-induced climate change. Based on widely accepted scholarly standards, a strong consensus in the scientific community finds that the earth is warming, and human activity plays a significant and reversible role (Verheggen et al., 2014). Nevertheless, public opinion, media discussions and policy debates in the U.S. remain starkly contentious, illustrating both a tenuous link between research evidence and policymaking, and the strategies by which interest groups advance their agendas into empirically oriented discussions. Such groups have created advocacy organizations to provide a voice as “experts,” even when they may have little or no background in the topic (Abrams, 2014).<sup>3</sup> This is done largely by establishing “institutes,” think tanks, and other organizations that house scholars said to have some expertise on the matter, and then getting their views out into the media and policymaking discussions through op-eds, testimony, books, etc. (Dunlap & Jacques, 2013).

On the other hand, some fields may exhibit a tighter link between expert-produced research and policymaking. For instance, medical fields typically have established standards for determining effective interventions for various conditions. Inasmuch as public resources are frequently leveraged to enhance access to such treatments through programs such as Medicaid and Medicare, policymakers often demand evidence on the effectiveness of various alternatives, and have established national institutes and administrative processes to investigate and evaluate the relative effectiveness (and efficiency) of various treatment options.<sup>4</sup>

There have been efforts to move education research more clearly into a domain like medicine, where experts evaluate different interventions based on shared understandings of appropriate research methods and expertise. The Institute of Education Sciences was established to promote empirical expertise in knowledge production. The No Child Left Behind Act repeatedly emphasized a demand for research-based decision-making; and the School Improvement Grant program states a clear preference for experimental and quasi-experimental research. Yet, since education policy is highly politicized and contentious,

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<sup>3</sup> A similar strategy was used by the tobacco industry to dispute the link between smoking and lung cancer (Oreskes & Conway, 2010; Specter, 2010).

<sup>4</sup> Of course, it would be wrong to suggest a clean link between scientific expertise and policymaking even in medicine, where we can also see the power of pharmaceutical lobby—the largest single sector in the lobbying industry—or the impulse for exploring alternative treatments (see Potter, 2011; Specter, 2010).

efforts to elevate the insights of experts may come at the cost of diminishing the voices of other valid constituencies, such as those of parents or the wider community, whose voices are necessarily marginalized when expert opinion is elevated (Lubienski & Lubienski, 2014). Moreover, despite such calls by policymakers for “evidence-based” interventions, there are questions as to whether those very same policymakers use evidence themselves in making education policy decisions (Horton, 2014; Lubienski & Weitzel, 2010; Thompson, 2014). Traditionally there has been an unclear and even tenuous link between education research and education policymaking (Firestone, 1989; Garland, 2011; Good, 1996; Labaree, 1998; Rothstein, 2004). The recent growth of advocacy organizations function to select, interpret and promote research for education policymakers, raises a number of important questions (Hess, 2008; Lubienski et al., 2011), including the extent to which expertise is valued in public and policy discussions on education; how expertise is understood in the intermediary sector, and within different groups within that sector; and the role of the media in giving standing and voice to various assertions of expertise in education policy.

Henig (2008) provided an in-depth, multi-method analysis of charter school research and reporting in the public sphere. Ultimately, he identified a larger problem with charter school research media reporting than charter school research itself. Charter school research reporting, Henig (2008) found, was routinely characterized by media sensationalism and misrepresentation. Conversely, in interviews he encountered many researchers who have evolved in their positions as a result of accumulating evidence. Charter school research, notwithstanding, has been characterized by some conflicting findings: Although many official evaluations and large scale studies find modest impacts at best (Braun, Jenkins, & Grigg, 2006; Lubienski & Lubienski, 2014; Raymond & Center for Research on Education Outcomes, 2009; Witte, 2000; Wolf et al., 2010), other secondary analyses and local studies find significant benefits (Angrist et al., 2011; Greene, Howell, & Peterson, 1997; Greene, Peterson, & Du, 1996; Hoxby, Mararka, & Kang, 2009; Hoxby & Muraka, 2007; Hoxby & Rockoff, 2004; Mayer, Peterson, Myers, Tuttle, & Howell, 2002). The initial media uptake on the release of these studies has varied considerably. The conflicting nature of the findings is often represented in a point-counterpoint manner in media accounts that feel the need to show balance, and we see arguments emerge about the extent to which findings reflect empirical expertise or ideological orientations (see also Bryk, 1981; Metcalf, 1998; Molnar, 1999). Nevertheless, over the longer term, patterns of advocacy around selected sets of these studies emerge (Center for Education Reform, 2000; Forster, 2009; Hassel & Terrell, 2006; Hassel, Terrell, Kain, & Ziebarth, 2007; Robinson, 2005). In deciding which studies to highlight, many of these individuals and organizations are certainly attempting to influence public and policy discussions (Lubienski, 2010). However, the degree to which intermediary organizations (IOs)—those groups operating in the space between research production and policymaking—have sufficient expertise to evaluate these different studies they promote (or dismiss) is an open question.

Increasing complexity in the apparatus around education policymaking in cases like these, from research funding and production to policy movement, is noted by Rick Hess, the Director of Education Policy at the American Enterprise Institute:

The school-choice community has done this very effectively. In Wisconsin, the Bradley Foundation and the Olin Foundation were instrumental in getting the Milwaukee Parental Choice Program passed—the first real voucher model in the country. They were then instrumental in providing political air cover for the program. They found and supported researchers to

document it, and they helped promote it nationally. The Walton Foundation has done the same thing with charter schools (quoted in Barr et al., 2008). In particular, we are seeing the growth of an advocacy sector that integrates many of these functions—including research promotion, media relations, policymaker connections, and public opinion management—within a policy domain where there is often a weak or tenuous link between research evidence on policy decisions (Lubienski et al., 2011). But the rise of these IOs also raises the question regarding the degree to which their advocacy is based on expertise. In fact, in view of the established media’s tendency to offer voice to at least two sides to every issue, a demand for IO contributions is common in the media even when the IO itself possesses an opinion and no real expertise on the topic.

## Analytical Approach

Based upon current trends in education policymaking and advocacy outlined above, we hypothesize that there are weak or non-significant relationships between measures of expertise and measures of media influence. Conversely, we expect individuals who are backed as “educational experts” by major advocacy organizations will tend to be more influential in terms of traditional and social media, irrespective of these individuals’ actual levels of expertise. We anticipate social media influence in particular will be elevated for individuals who are backed by major advocacy organizations. In any case, we expect that this study will improve our understanding relative to the manner and quality of contemporary contributions to public opinion and policy.

In order to offer an ideologically diverse pool of experts and/or pundits, we rely on a small set of public lists. First, we drew from Rick Hess’s (2014a) recent *RHSU Edu-Scholar Public Influence Rankings*<sup>5</sup>, available from *Education Week* and the American Enterprise Institute, where Hess is the director of Education Policy. We included each of the 200 identified individuals used in Hess’s analysis. We also mirror his approach to identifying and calculating several variables for our study (Hess, 2014b), as we describe within the Methods section. Second, we drew from Hess’s (2011) *A Handy 2012 Rolodex Supplement for Edu-Reporters*<sup>6</sup> to identify additional individuals in ways that would broaden the ideological and institutional range for our sample. This list, which is geared toward identifying conservative thinkers, included three names that overlap with his original list. Next, we utilized a National Education Policy Center memo<sup>7</sup> (Welner, Mathis, & Molnar, 2012) that provides a list of individuals who could speak to the overall knowledge base in given areas of policy. This list substantially overlapped with Hess’s (2014a), yet contributed numerous additions. Next, we searched the internet for individuals listed as experts within a set of eleven major educational advocacy organizations identified by DeBray-Pelot, Lubienski and Scott’s (2007) overview of the institutional landscape of education policy, based on a survey of organizations involved in incentivist policy. We were able to identify individuals listed as educational experts at four major policy outfits: the conservative Heritage Foundation, the conservative American Enterprise Institute (AEI), the libertarian Cato Institute, and the union-funded Economic Policy Institute (EPI). Finally, we added a small number of individuals who we knew to

<sup>5</sup> [http://blogs.edweek.org/edweek/rick\\_hess\\_straight\\_up/2014/01/the\\_2014\\_rhsu\\_edu-scholar\\_public\\_influence\\_rankings.html](http://blogs.edweek.org/edweek/rick_hess_straight_up/2014/01/the_2014_rhsu_edu-scholar_public_influence_rankings.html)

<sup>6</sup> [http://blogs.edweek.org/edweek/rick\\_hess\\_straight\\_up/2011/10/a\\_handy\\_2012\\_rolodex\\_supplement\\_for\\_edu-reporters.html](http://blogs.edweek.org/edweek/rick_hess_straight_up/2011/10/a_handy_2012_rolodex_supplement_for_edu-reporters.html)

<sup>7</sup> [http://nepc.colorado.edu/files/nepc-policymemo\\_experts\\_8-12.pdf](http://nepc.colorado.edu/files/nepc-policymemo_experts_8-12.pdf)

possess educational expertise and/or influence, yet were omitted from the other lists.<sup>8</sup> In all, these processes led us to include 287 persons (see Appendix).

## Methods

In this study, we examined the extent to which individuals' estimated expertise relates to the degree to which they are cited within the media and/or the blogosphere. We also included a measure of individuals' level of presence on a major social media platform (Twitter) in relationship to estimated expertise. We relied upon three recently constructed and previously described lists of experts and/or influential persons in the areas of education and educational policy. We supplemented the lists by adding individuals listed as educational experts by one of four major advocacy organizations whose focus includes American education, and by adding a small number of individuals who were not yet represented by these methods but who clearly (based upon our own knowledge and experiences) possess educational expertise and/or influence. This process, in all, identifies 287 individuals. However, for analyses including a proxy variable for years of experience, our sample was limited to 235 cases for whom we were able obtain the requisite information.

We mirror Hess (2014a) in developing several of our criteria: we identified three criteria as potential independent variables representing individuals' expertise: a Google Scholar metric, a measure of book points, and a highest Amazon ranking metric. Based upon data (i.e., distribution of values) and non-data considerations (e.g., our understanding of the expertise construct), we determined the Google Scholar metric to be the strongest expertise measure. Thus, we did not proceed with inferential statistical analyses of book points or highest Amazon ranking. We also created a proxy for years of experience to be included as an independent variable, reasoning a person's individuals' expertise and/or media influence might relate to their accumulated experience. To calculate this value, we simply subtracted (from 2014) the year in which the person received their highest educational degree. We were unable to obtain this information for 52 individuals. Lastly, we created a dummy variable to represent a form of attained expertise, whether or not each individual had earned a doctoral degree or equivalent; we treat J.D., Ed.D., M.D., and Ph.D. similarly.

With respect to our dependent variables representing media influence, we mirror Hess (2014a) to include educational press mentions, blog mentions, newspaper mentions, and Klout points. We reasoned educational press mentions and newspaper mentions represent traditional media, while blog mentions and Klout points more so represent new, or social, media.

By examining the relationships between our independent and dependent variables, we aimed to assess relationships between individuals' expertise, organizational affiliation, and individual orientation, and their opportunities to weigh in on current educational policy debates (i.e., their media influence).

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<sup>8</sup> Creating these lists of names is always somewhat of a subjective endeavor. The lists we drew from to create our master list, for example, acknowledge that they are incomplete, and that other names could have—and perhaps should have—been included. We included all the names on those lists. Furthermore, in supplementing those lists with a small set of additional names, we based our decision on our combined 25 years of education policy research, noting prominent individuals who had been omitted from the other lists, and then soliciting additional advice from colleagues at other institutions. Notably, we only added, and did not remove anyone from the lists. Since the master list is not meant to be a representative sample, but a comprehensive list of prominent individuals, we believe this approach to be most appropriate.



## Measures

As stated previously, several of our measures were modeled directly from the approach outlined by Hess (2014b). We departed from his approach only insofar as we modified date ranges and search dates to be consistent with the timeframe of this study. For example, Hess values were compiled in the month of December, and date ranges were constructed accordingly (e.g., for Newspaper mentions, the date range chosen was January 1 – December 16, 2013). By contrast, we utilized the date range of January 1 – December 31, 2013. As a final precaution we compared our obtained values to those individuals who appeared on Hess's list. We used different date parameters and expected somewhat different results. However, we reasoned significant departures would raise the possibility of a flawed search. In some cases Hess divided obtained values by an integer; while we mimicked this initially, when it was time for analyses we undid this approach so that data could be interpreted more easily. Lastly, for all measures we used middle initials in secondary searches for some individuals with relatively common names, in an effort to differentiate the intended individual from a similarly named person. Below, we provide substantial detail regarding each measure we used; the reader is referred to Hess (2014a) for additional detail.

## Independent Variables

**Google Scholar metric.** Up to February 5, 2014, we examined articles, books, or papers each individual had authored or co-authored, using the following technique: First, the advanced search “author” filter was used, taking care to pass over work produced by similarly named authors. We then tallied and sorted works by the number of times each work was cited, identifying the point at which the number of works exceeds the number of times the author was cited by that work. For instance, an author whose 30<sup>th</sup> most cited work is cited 42 times, but whose 31<sup>st</sup> most cited work is cited 8 times, received a score of 30. Mirroring Hess (2014b), we capped scores at 50. This metric is known as an h-index (Hirsch, 2005) and is intended to measure both the breadth and impact of an individual's work. In this study, we conceptualize it as a measure of expertise, reasoning that an individual's score represents both the amount to which he or she has produced scholarship, and the extent to which other scholars are paying heed and engaging with the works. On this measure, individuals' scores ranged from 0 to 50 ( $M = 20.08$ ;  $SD = 15.38$ ). Thirty-one individuals earned zero points, and 23 earned a full 50 points.

**Years of experience proxy.** For each individual, we conducted internet searches to identify the individual's highest educational attainment (degree completion), and the year in which the degree was awarded. Next, we subtracted the person's year of degree from 2014 to produce an estimate of years of experience. We reasoned this variable should be included in our models to the extent possible, since it could relate to scholarly output (“expertise”) and/or media influence. For instance, an academic who has more experience (and, for instance, has successfully achieved tenure) might be able to re-orient to alter her focus somewhat toward making an influence. Likewise, an individual with more experience might have earned a reputation and/or established an area of expertise for which they are sought. For 52 individuals, we were unable to obtain this information and produce a years of experience value. Among those for whom we were able to calculate a value, scores ranged from 1 to 54 ( $M = 22.33$ ;  $SD = 12.95$ ).

**Doctoral degree attainment (dummy variable).** For each individual, we included a measure of whether or not they had attained a doctoral-level degree. For this sample, 263 of 287 (91.6%) had done so. We found 15 individuals whose highest degree was a Master's, and 9 who had earned a Bachelor's degree.

## Dependent Variables

**Education press mentions.** As described by Hess (2014b), we recorded the total number of times each individual was quoted or mentioned in either *Education Week* or the *Chronicle of Higher Education*. We counted quotes or mentions from the time period between January 1 and December 31, 2013. Departing from Hess, we did not divide the total number of appearances by two; to have done so would have made our statistical models more challenging to interpret. We utilized the search tool offered at each respective site. On this measure, scores ranged from 0 to 60 points ( $M = 3.28$ ,  $SD = 7.36$ ), with 39% of individuals earning zero points.

**Newspaper mentions.** Like Hess (2014b), we used a *Lexis Nexis* search to record the number of times each individual was quoted or mentioned in U.S. newspapers. We used the date range of January 1 to December 31, 2013. We initially divided the resulting number of mentions by two and capped scores at 30. When we analyzed the data we multiplied values by two to yield a cap of 60. On this measure, individuals' scores ranged from zero to 60 points ( $M = 17.18$ ,  $SD = 20.99$ ); 17% of individuals earned scores of zero points.

**Blog mentions.** We followed Hess' methodology (2014b) by recording the number of times a scholar was referenced by a blog, utilizing the Google Blogs search tool. Like Hess, scores were calculated by dividing total mentions by four, and were capped at 30. When we analyzed data, however, we first multiplied all values by four, yielding a cap of 120. On this measure, individuals' scores ranged from zero to 120 points ( $M = 41.08$ ,  $SD = 49.8$ ). Sixty-five individuals (22.6%) earned the maximum (120) points on this measure.

**Klout points.** Mirroring Hess (2014b), we determined whether each individual had a Twitter profile, taking care to rule out similarly named individuals. All individuals lacking a Twitter profile received a zero on this measure, as well as individuals with a Twitter profile but without a Klout Score. For individuals with a Klout Score, like Hess we divided their scores by 10 to calculate points earned, yielding max scores of 10. When we analyzed data, however, we multiplied values by 10 to yield max scores of 100. On this measure, individuals' scores ranged from zero to 100 points ( $M = 7.85$ ,  $SD = 19.55$ ); 85.7% of individuals earned scores of zero points.

## Results

Because our primary measures yield count data, which violate the constant error variance assumption of linear regression, we employed generalized linear models with a *log* link to examine the relationships between the measures of expertise and the measures of media influence. To deal with overdispersed data—in which the variance of regressed measures exceeded the mean, diverging from the Poisson distribution (Ver Hoef & Boveng, 2007)—we used quasi-Poisson regression modeling for our final statistical analyses. Quasi-Poisson regression modeling incorporates an estimated dispersion parameter to account for the divergence, thereby improving the accuracy of inferences (Zeileis, Kleiber, & Jackman, 2008). Preceding each analysis, we employed stepwise model selection (using the *step* function as part of the R statistical computation and graphics system) and diagnostic tests to arrive upon an optimal model and to assure the necessity of quasi-Poisson versus other approaches, respectively.

### Traditional Media Influence

Education press mentions and newspaper mentions, in our view, represent more traditional media influence. First, we assessed the prediction of newspaper mentions. After

performing stepwise model selection, our final quasi-Poisson model included the doctoral dummy and the Google Scholar variable as predictors:

$$\log(\text{newspaper mentions}) = \beta_0 + \beta_1(\text{doctoral}) + \beta_2(\text{Google Scholar score}) + \varepsilon$$

where doctoral = 1 if the subject holds a doctoral degree and 0 otherwise.

The Google Scholar ( $\beta = 0.02$ ,  $SE = 0.00$ ,  $p < .001$ ) and doctoral ( $\beta = .02$ ,  $SE = 0.25$ ,  $p < .01$ ) were significant, such that individuals without doctoral degrees are more likely to be cited, while individuals with a higher google scholar score are more likely to be cited. The residual deviance in this model (6524.7, 284 *df*) is significantly worse than the saturated model,  $p < .001$ .

Next, we studied the prediction of educational press mentions. After performing stepwise model selection, our final model included AEI membership (dummy) as a predictor. Thereby, our quasi-Poisson model was represented as follows:

$$\log(\text{education press mentions}) = \beta_0 + \beta_1(\text{AEI membership}) + \varepsilon$$

where AEI membership = 1 if the subject is listed as an expert by AEI and 0 otherwise.

AEI membership remained significant ( $\beta = 0.91$ ,  $SE = 0.43$ ,  $p = .03$ ), such that being publicly backed by AEI is associated with 2.48 times more educational press mentions. We performed a chi-square test of this model in comparison to the saturated model; this model (residual deviance of 2119.6, with 285 *df*) is significantly different (worse than) the saturated model,  $p < .001$ .

### New or Social Media

We believe blog mentions and Klout points represent new or social media influence. With blog mentions as a dependent variable, our final, selected model included the Google Scholar variable, the doctoral dummy, the Cato dummy, and the AEI dummy as predictors, as follows:

$$\log(\text{blog}) = \beta_0 + \beta_1(\text{Google Scholar}) + \beta_2(\text{doctoral}) + \beta_3(\text{Cato}) + \beta_4(\text{AEI}) + \varepsilon$$

where doctoral = 1 if the subject holds a doctoral degree and 0 otherwise; and Cato = 1 and AEI = 1 if the individual is listed as an expert by the organizations, respectively, and 0 otherwise.

In this case, Google Scholar ( $\beta = 0.01$ ,  $SE = 0.00$ ,  $p < .01$ ) and the doctoral dummy ( $\beta = -0.83$ ,  $SE = 0.25$ ,  $p < .001$ ) remained significant, such that a one unit increase in Google Scholar score is associated with a 1% increase in blog mentions, and a doctoral degree is associated with 67% fewer blog mentions. Again, though, this model performed significantly worse than a saturated model.

Public backing as an educational expert by Cato and AEI, although non-significant was associated with 1.78 and 1.5 times as many blog mentions, respectively. Each noted expert of the Cato Foundation received the maximum score on this measure. However, only three Cato individuals are included in this analysis. The three Heritage experts averaged 81 points on this measure, as compared to 41.08 for the total population. These descriptive data suggest group membership may be more influential in terms of blog mentions than is implied by the results of our general linear model analyses.

Figure 1 displays mean Google Scholar points and blog mentions, by organizational backing/membership. Table 1 provides means and standard deviations, by organizational backing/membership, on a measure of expertise (Google Scholar points) and each measure of media influence.

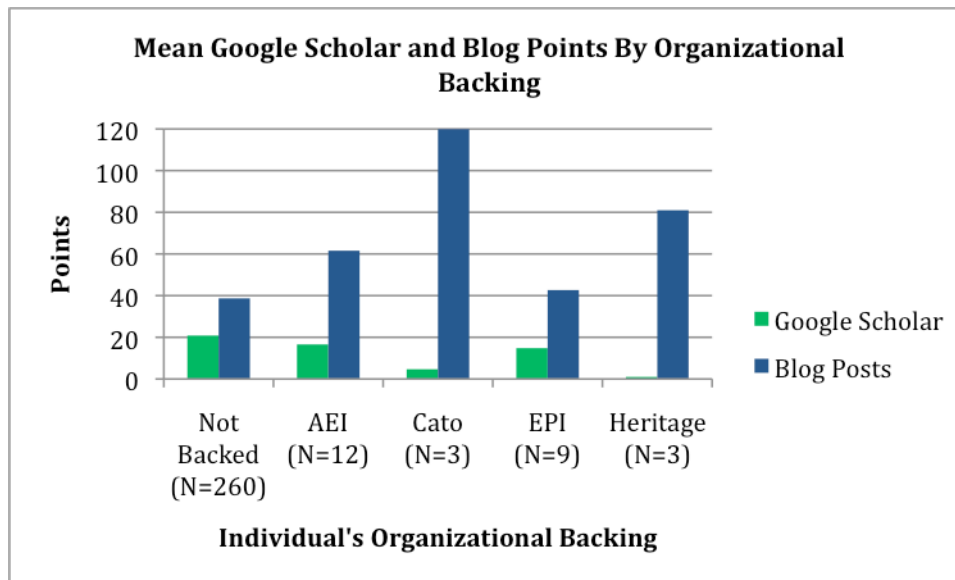


Figure 1. Individuals' "expertise" (Google Scholar score) and "influence" (blog mentions), by organizational backing.

Table 1

*Descriptive Statistics Regarding Individuals' Expertise and Influence, by Advocacy Organization Backing*

Organization	Expertise		Influence		
	Google Scholar		Traditional Media		New/Social Media
			Ed Press	Newspaper	Blog Klout
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )
Not Backed (N=260)	20.83 (15.43)	3.15 (6.82)	17.48 (21.11)	38.71 (48.63)	6.58 (18.23)
AEI (N=12)	16.58 (12.70)	7.67 (16.68)	9.42 (24.52)	61.58 (55.88)	18.83 (27.96)
Cato (N=3)	4.67 (4.04)	1.67 (2.08)	29.33 (26.86)	120.00 (0.00 <sup>a</sup> )	54.33 (6.66)
EPI (N=9)	14.78 (15.09)	2.67 (3.32)	4.67 (4.9)	42.67 (53.94)	6.44 (19.33)
Heritage (N=3)	1.00 (1.73)	0.67 (0.58)	8.00 (7.55)	81.00 (67.55)	31.67 (27.43)

<sup>a</sup> All individuals backed by the Cato Institute earned a maximum of 120 points on this measure; thus, the standard deviation of scores is zero.

Next, we pursued a model with Klout points as a dependent variable. Our final, selected model included the doctoral dummy and the Cato and AEI membership (dummy) variables as predictors, as follows:

$$\log(Klout) = \beta_0 + \beta_1(doctoral) + \beta_2(Cato) + \beta_3(AEI) + \varepsilon$$

where doctoral = 1 if the individual holds a doctoral degree and 0 otherwise; and Cato = 1 and AEI = 1 if the individual is listed as an expert by the organizations, respectively, and 0 otherwise.

In this model, which performed significantly worse than the saturated model ( $p < .001$ ), doctoral remained significant ( $\beta = -1.21$ ,  $SE = 0.37$ ,  $p < .01$ ), whereas Cato ( $\beta = 1.01$ ,  $SE = 0.65$ ,  $p = .12$ ) and AEI ( $\beta = 0.83$ ,  $SE = 0.50$ ,  $p = .10$ ) were not. In this case, possession of a doctoral degree is associated with fewer Klout points, whereas membership in Cato (2.75x) and AEI (2.30x) are associated with substantially higher Klout points. Issues related to low sample sizes likely arose in this instance as well. Figure 2 displays mean Google Scholar and Klout points by organizational backing/membership.

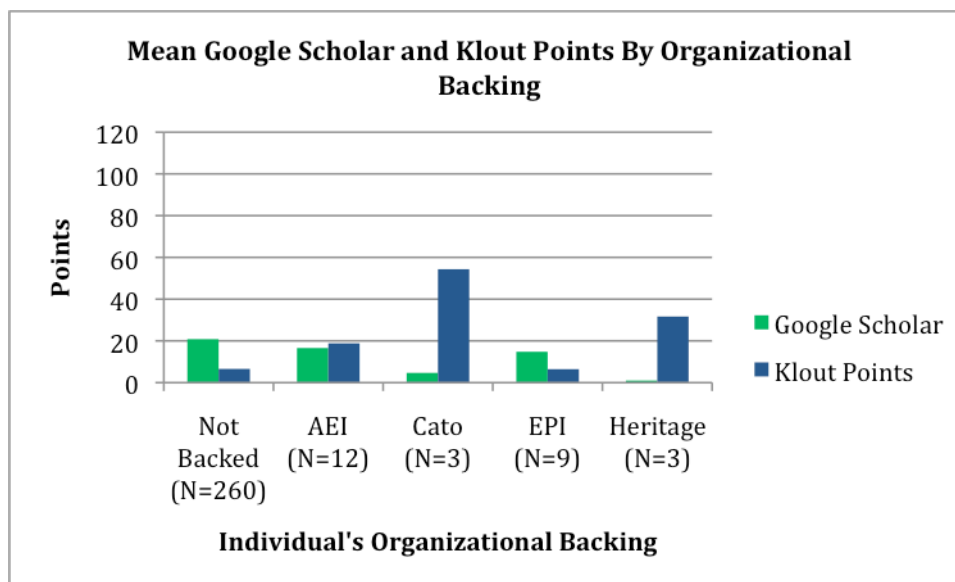


Figure 2. Individuals' "expertise" (Google Scholar score) and "influence" (Klout points), by organizational backing.

### Models with Years of Experience Proxy Included

We also ran a series of analyses with an experience (in years) proxy variable. We were unable to obtain this information for 52 individuals. The majority of these are individuals who are backed by certain organizations (e.g., Cato and Heritage), have not obtained doctoral level degrees, and are employed outside of academia<sup>9</sup>. For instance, we were unable to find years of experience information for any of the individuals backed by the Heritage Foundation. Thus, analyses including the experience proxy variable did not include

<sup>9</sup> For instance, we were unable to find years of experience information for any of the individuals backed by the Heritage Foundation.

organization-specific dummy variables. Instead they included a more generic “backed by an organization” dummy.

Surprisingly, the experience proxy variable emerged as a significant predictor only when we included newspaper mentions as our dependent variable, as follows:

$$\log(\text{newspaper}) = \beta_0 + \beta_1(\text{Google Scholar}) + \beta_2(\text{organization backing}) + \beta_3(\text{doctoral}) + \beta_4(\text{experience}) + \varepsilon$$

where organization backing = 1 if the individual is backed by Cato, Heritage, or AEI and 0 otherwise; and doctoral = 1 if the individual holds a doctoral degree and 0 otherwise.

In this quasi-Poisson model, the doctoral dummy ( $\beta = -0.91$ ,  $SE = 0.34$ ,  $p < .01$ ) and experience proxy ( $\beta = -0.02$ ,  $SE = 0.01$ ,  $p = .02$ ) remained significant predictors of newspaper citations. Of concern, a doctoral degree was associated with about 60% fewer newspaper citations, holding other variables constant. Conversely, each one unit increase in experience is associated with about 1% more newspaper citations.

## Discussion

Recently, columnist Nicholas Kristof (2014) wrote a popular piece in the *New York Times* calling on academics to take advantage of new media in order to be better engaged in public discussions of policy and other social issues:

Professors today have a growing number of tools available to educate the public, from online courses to blogs to social media. Yet academics have been slow to cast pearls through Twitter and Facebook. Likewise, it was TED Talks by nonscholars that made lectures fun to watch (but I owe a shout-out to the Teaching Company’s lectures, which have enlivened our family’s car rides).

Kristof’s (2014) admonition to academia generated a fair amount of discussion, and highlighted some important factors that relate to our findings. We know a handful of academics have been highly successful in engaging through new media. Some have tens of thousands of followers on Twitter, making a point to communicate with a broader audience of non-experts on issues pertaining to their own research, or that of their associates (Goldie et al., 2014; Petrilli, 2014). Furthermore, a large-scale, comprehensive and on-going study of policymakers’ use of evidence, based on interviews with some 200 policymakers in several key cities embracing incentivist policies, indicates that they are looking to these new media forums as a primary source of information on research findings (see Lubienski et al., 2014).

Kristof’s (2014) point that many researchers hesitate to engage broader audiences highlights the disjuncture in incentive structures for academics to engage in discussions with other experts compared to engaging in discussions with non-expert audiences. Typically, researchers are rewarded for communicating with other experts through peer-reviewed journal articles, which often entails arcane and inaccessible language. Kristof’s (2014) imagery of “casting pearls” may suggest some condescension assumed to be associated with the ivory tower, with broader audiences implicitly representing the “swine” in that metaphor. Academic researchers might recognize a disincentive to speak with the media, submit an op-ed, or write a blog, because it is not rewarded, and may expose them to unwanted criticism. Yet, individuals at many IOs are incentivized to do so, thus engaging with a broader audience, advancing their organization’s agenda. It is also likely that academic researchers, on

average, do not possess skills and background in media engagement that are commensurate with individuals who tend to work for the IOs.

The traditional media may also exhibit a stronger demand for non-academic voices. While affiliation with a university may represent prestige, credibility and expertise, academics oftentimes speak in a specialized language, throwing in many caveats as is the custom in presenting research findings. This approach does not always appeal to journalists writing to a mass audience of non-experts.

Following our hypotheses, our findings suggest individuals with less expertise, as commonly measured, can often have greater success in media penetration. For instance, being affiliated with AEI was associated with nearly 2.5 times more educational press mentions than that shown by the full sample, with the Google Scholar measure of expertise showing no relationship with educational press mentions. As another example, each member of the Cato Institute received maximum points on the blog mentions measure, even though their average estimated expertise ( $M = 4.67$ ) was substantially lower than that of the full sample ( $M = 20.08$ ). Although some such individuals might not have formal training in research methods for analyzing the issues on which they are speaking, such individuals often have the skills and orientations that will make them more accessible and appealing to the media. Moreover, when such individuals are affiliated with organizations with a strong media arm or outreach effort, they have both the support and, typically, the incentive to engage broader and policy audiences. In particular, as our data suggest, newer forms of media may offer particularly useful opportunities for directly engaging such audiences, while bypassing traditional forms of quality checks on expertise, such as editorial review.

As such, these findings suggest that there is reason for serious concern regarding the evidentiary basis for education policy in the United States. As more media-oriented individuals and advocacy organizations enjoy a larger role in policy discussions—and in particular in new media—regardless of actual expertise in conducting or interpreting research, they may be expected to have an inordinate role in shaping not only policy deliberations, but policy formation. Particularly as the public becomes jaded by he-said/she-said treatment of technical policy questions in traditional media channels, control of the conversation in new media such as blogs or Twitter may offer new opportunities for shaping public and policymaker opinion, even as such new channels often mean the loss of editorial oversight. Only time will tell whether these new opportunities to broaden conversations in a more democratic direction will come at the expense of expert treatment of complex social issues.

Our findings offer some pause on that question, indicating that many of the individuals expected to have some expertise on social issues are often far removed from the popular and policy conversations on these issues. In the vacuum their absence creates, other agenda-driven organizations and individuals are well positioned to step in and offer their perspectives, even when those perspectives may not be informed by traditional measures of expertise. Although our findings do not prescribe remedies, we believe they hold implications for various stakeholders. For members of the media, we believe caution and consideration of individuals' expertise and affiliations are warranted when researching topics and seeking insights. Similarly, those who consume it—including policymakers and laypersons, who increasingly stay informed via new, direct forms of media—are well advised to exercise similar caution. Meanwhile, academic researchers who wish to see that their scholarly work has impact beyond their academic audience may want to devote a greater share of their attention to the art of communication via traditional and new media. In the



absence of these and other steps, policy changes in the realm of education will too often continue to be guided more so by ideology and agendas than by research.

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## Appendix

List of identified individuals and their organizational backing, if applicable:

Last Name	First Name	Organizational Backing
Allen	Jeanne	
Allensworth	Elaine	
Amrein-Beardsley	Audrey	
Andrews	David W.	
Arcidiacono	Peter	
Artiles	Alfredo	
Arum	Richard	
August	Diane	
Bailey	Thomas R.	
Bailey	John	
Baker	Bruce D.	
Baker	Eva L.	
Balfanz	Robert	
Ball	Deborah L.	
Ballou	Dale	
Barnett	Steve	
Bassok	Daphna	
Bedrick	Jason	Cato
Belfield	Clive	
Benbow	Camilla	
Bennett	Tony	
Berliner	David	
Bettinger	Eric	
Betts	Julian R.	
Biegel	Stuart	
Binder	Amy J.	
Bishop	Malachy	
Bonk	Curt	
Borman	Geoffrey	
Bransford	John D.	
Braun	Henry	
Breneman	David	
Brewer	Dominic	
Briggs	Derek	

Last Name	First Name	Organizational Backing
Briggs	Kerri	
Bryk	Anthony S.	
Buck	Stuart	
Bulkley	Katrina (Kati)	
Burke	Lindsey	Heritage
Burkholder	Zoe	
Butcher	Jonathan	
Butin	Dan	
Carlson	Deven	
Carnoy	Martin	EPI
Carter	Prudence	
Castleman	Ben	
Cheney	Lynne	AEI
Clotfelter	Charles	
Cochran-Smith	Marilyn	
Cohen	David K.	
Cohen-Vogel	Lora	
Comer	James P.	
Cookson	Peter	
Corcoran	Sean	EPI
Costrell	Bob	
Coulson	Andrew J.	Cato
Cowen	Joshua	
Cross	Chris	
Cuban	Larry	
Daniel	David B.	
Darling-Hammond	Linda	
DeBray	Elizabeth	
Dee	Thomas	
Deming	David	
Desimone	Laura	
Dickinson	David	
Dixson	Adrienne	
Dobbie	William	
Dorn	Sherman	
Downes	Thomas	
Duncan-Andrade	Jeff	
Dynarski	Susan	
Elmore	Richard F.	

Last Name	First Name	Organizational Backing
Enlow	Robert	
Evers	Bill	
Ferguson	Ronald F.	
Feuer	Michael	
Figlio	David	
Finn	Chester	
Fischer	Kurt	
Forster	Greg	
Frankenberg	Erica	
Friesen	Norm	
Fryer	Roland	
Fuchs	Lynn	
Fuhrman	Susan	
Fullan	Michael	
Fuller	Bruce	
Fullerton	Jon	
Fusarelli	Lance	
Gamoran	Adam	
Gándara	Patricia	
Garcia	David	
Garcia	Emma	EPI
Gardner	Howard	
Gasman	Marybeth	
Geiser	Saul	
Glass	Gene V.	
Goertz	Margaret (Peg)	
Goldhaber	Dan	AEI
Goldrick-Rab	Sara	
Goldring	Ellen	
Gordon	Nora	
Graham Keegan	Lisa	
Green	Preston	
Greene	Jay P.	
Grogan	Margaret	
Guthrie	Jim	
Gutierrez	Kris	
Haertel	Edward H.	
Hakuta	Kenji	
Hanushek	Eric	
Hargreaves	Andy	

Last Name	First Name	Organizational Backing
Harper	Shaun	
Harris	Douglas N.	EPI
Heller	Donald	
Henig	Jeffrey R.	
Henry	Gary T.	
Hess	Rick	AEI
Hickok	Gene	
Higgins	Monica	
Hill	Paul T.	
Hill	Heather C.	
Honig	Meridith	
Howley	Craig	
Hoxby	Caroline	
Huerta	Luis	
Huggins	Gary	
Immordino-Yang	Mary Helen	
Ingersoll	Richard	
Jacob	Brian A.	
Jacobsen	Rebecca	
Jennings	Jennifer L.	
Johnson	Susan Moore	
Kagan	Sharon Lynn	
Kane	Thomas J.	
Kelly	Andrew P.	AEI
Kirp	David	
Kirst	Michael W.	
Kitch	Edmund W.	AEI
Klatt	Vic	
Klingner	Janette	
Koedel	Cory	
Koretz	Daniel	
Koski	William	
Kress	Sandy	
Kumashiro	Kevin	
Kurlaender	Michal	
Labaree	David	
Ladd	Helen (Sunny)	
Ladner	Matt	
Ladson-Billings	Gloria	

Last Name	First Name	Organizational Backing
Lake	Robin L.	
Lautzenheiser	Daniel K.	AEI
Lee	Caroline	
Levesque	Patricia	
Levin	Henry M.	
Loeb	Susanna	
Long	Bridget Terry	
Losen	Daniel	
Loss	Christopher	
Lubienski	Christopher	
Lugg	Catherine	
Manna	Paul	
Maranto	Robert	
Marshall	Jennifer	Heritage
Mathis	William	
McCandliss	Bruce	
McCluskey	Neal	Cato
McDermott	Kathryn A.	
McEwan	Patrick	
McGuinn	Patrick J.	
McLaughlin	Margaret	
McLendon	Michael	
McLeod	Scott	
McPherson	Robert H.	
McShane	Michael Q.	AEI
Mehta	Jal	
Merrifield	John	
Miller	Charles	
Milner	Richard	
Miron	Gary	
Moe	Terry	
Molnar	Alex	
Morrell	Ernest	
Murnane	Richard J.	
Murphy	Joseph	
Murray	Charles	AEI
Neville	Helen	
Nieto	Sonia	
Noddings	Nel	
Noguera	Pedro	



Last Name	First Name	Organizational Backing
Oldham	Cheryl	
Orfield	Gary	
Pacheco	Arturo	
Pallas	Aaron	
Papay	John	
Pastorek	Paul	
Perna	Laura	
Peterson	Paul E.	
Petrilli	Mike	
Pianta	Robert	
Plucker	Jonathan A.	
Podgursky	Michael	
Polikoff	Morgan	
Porter	Andrew C.	
Raudenbush	Steve	
Ravitch	Diane	
Raymond	Margaret (Macke)	
Reardon	Sean	
Reback	Randall	
Rebell	Michael	
Reckhow	Sarah	
Rees	Nina	
Reich	Rob	EPI
Reininger	Michelle	
Rice	Jennifer King	EPI
Rich	Wilbur	
Rockoff	Jonah	
Roderick	Melissa	
Rodriguez	Awilda	AEI
Rogers	John	
Ronfeldt	Matthew	
Rose	Mike	
Rothstein	Richard	EPI
Rothstein	Jesse	
Roza	Marguerite	
Rumberger	Russ	
Ryan	James E.	
Sahlberg	Pasi	
Schmidt	Bill	

Last Name	First Name	Organizational Backing
Schneider	Barbara	
Schneider	Mark	AEI
Scott	Janelle	
Scott	Robert	
Scott-Clayton	Judith	
Shepard	Lorrie	
Shober	Arnold	
Simon	Mark	EPI
Skiba	Russ	
Slavin	Robert	
Smith	Thomas	
Snell	Lisa	
Spillane	James	
Springer	Matthew	
Staiger	Douglas O.	
Steiner	David	
Stergios	Jim	
Stevens	Mitchell	
Stotsky	Sandy	
Strunk	Katharine	
Stuart-Wells	Amy	
Suarez-Orozco	Marcelo	
Supovitz	Jonathan	
Sykes	Gary	
Teranishi	Robert	
Teske	Paul	
Thomas	Paul	
Tomlinson	Carol	
Trent	William	
Turner	Sarah E.	
Tyler	John H.	
Van Beek	Michael	
Vasquez Heilig	Julian	
Vedder	Richard	AEI
Vigdor	Jacob	AEI
Wagner	Tony	
Walden Ford	Virginia	Heritage
Warschauer	Mark	
Weiss	Elaine	EPI
Welner	Kevin G.	

Last Name	First Name	Organizational Backing
West	Martin R.	
Willingham	Daniel T.	
Wineburg	Sam	
Winston	David	
Winters	Marcus A.	
Witte	John	
Wohlstetter	Priscilla (Penny)	
Wolf	Patrick J.	
Wong	Kenneth K.	
Wurman	Ze'ev	
Wyckoff	James H.	
Young	Michelle	
Zeichner	Kenneth	
Zhao	Yong	
Zimmer	Ronald F.	
Zimmerman	Jonathan	

*Note.* AEI: American Enterprise Institute; EPI: Economic Policy Institute

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